

## REMARKS

This is intended as a full and complete response to the Office Action dated March 14, 2007, having a shortened statutory period for response set to expire on June 14, 2007. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1, 2, 4-12, 14, 16-22, and 25-27 remain pending in the application and are shown above. Claims 3-5, 7, 13, 15, and 23-25 have been canceled by Applicant, and claims 1, 2, 4-12, 14, 16-22, and 25-27 have been rejected by the Examiner. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 1, 6, 11, 14, and 21, 26, and 27 are amended to clarify the invention. Claims 28-34 have been added. The amendments and new claims provide no new matter.

### ***Claim Rejections Under 35 USC § 103***

Claims 1, 4-6, 8-11, 14, 18-21, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Davis* (US 6,346,702) in view of *Cooper et al.* (US 2002/0025097) and *Wang et al.* (*Wang et al.*: "Analysis and Suppression of Continuous Periodic Interference for On-Line PD Monitoring of Power Transformers," High Voltage Engineering Symposium, 22-27 August 1999, 5.212.P5).

Claims 2, 7, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Davis et al.* (US 6,346,702) and *Cooper et al.* (US 2002/0025097) and *Wang et al.* (*Wang et al.*: "Analysis and Suppression of Continuous Periodic Interference for On-Line PD Monitoring of Power Transformers," High Voltage Engineering Symposium, 22-27 August 1999, 5.212.P5) as applied to claims 1, 11, and 21 above, and in further view of *Keown* (US 4,143,350).

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Davis et al.* (US 6,346,702) and *Cooper et al.* (US 2002/0025097) and *Wang et al.* (*Wang et al.*: "Analysis and Suppression of Continuous Periodic Interference for On-Line PD Monitoring of Power Transformers," High Voltage Engineering Symposium,

22-27 August 1999, 5.212.P5) as applied to claim 11 above, and in further view of *Kringlebotn* (US 6,097,487).

Applicant has amended claims 1, 11, and 21 to include removing periodic noise using frequency based gating. The Examiner argues that *Cooper et al.* uses gating to remove periodic noise from the electrical signals. However, the gating used by *Cooper et al.* is time based, whereas the gating of the present invention is based on frequency. The other references cited by the Examiner cannot overcome this deficiency. Therefore, claims 1, 11, and 21 and all claims dependent on 1, 11, or 21 are not obvious and are allowable.

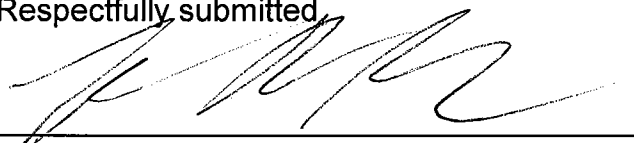
In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

### **Conclusion**

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



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